Amendments to the Claims

1. (Currently amended) A process for producing a living radical polymer characterized in that which comprises polymerizing a vinyl monomer is polymerized with use in the presence of an organotellurium compound represented by the formula (1), an azo type polymerization initiator and a ditelluride compound represented by the formula (2)

$$R^2$$
 R^4
 $Te R^1$
 R^3
 (1)

wherein R^1 is C_1 - C_8 alkyl, aryl, substituted aryl or an aromatic heterocyclic group, R^2 and R^3 are each a hydrogen atom or C_1 - C_8 alkyl, and R^4 is aryl, substituted aryl, an aromatic heterocyclic group, acyl, oxycarbonyl or eyano. cyano.

$$(R^1Te)_2 (2)$$

wherein R¹ is the same as above.

2. (Currently amended) A living radical polymer obtainable_produced by polymerizing a vinyl monomer with use_in the presence of an organotellurium compound represented by the formula (1), an azo type polymerization initiator and a ditelluride compound represented by the formula (2)

$$R^4$$
 Te
 R^3
 Te
 R^1
 R^3

wherein R^1 is C_1 - C_8 alkyl, aryl, substituted aryl or an aromatic heterocyclic group, R^2 and R^3 are each a hydrogen atom or C_1 - C_8 alkyl, and R^4 is aryl, substituted aryl, an aromatic heterocyclic group, acyl, oxycarbonyl or cyano.

2

 $(R^{1}Te)_{2}$ (2) wherein R^{1} is the same as above.

3. (Currently amended) A mixture of an organotellurium compound represented by the formula (1), an azo type polymerization initiator and a ditelluride compound represented by the formula (2)

$$R^2$$
 R^4
 R^3
 $Te R^1$
 R^3
 (1)

wherein R^1 is C_1 - C_8 alkyl, aryl, substituted aryl or an aromatic heterocyclic group, R^2 and R^3 are each a hydrogen atom or C_1 - C_8 alkyl, and R^4 is aryl, substituted aryl, an aromatic heterocyclic group, acyl, oxycarbonyl or cyano,

$$(R^1Te)_2 \qquad \qquad (2)$$

wherein R¹ is the same as above.